UNIT DESCRIPTIONS:

Unit 1 BONNEVILLE LAKE DEPOSITS

Post-Bonneville soil –

1S Brown (10 YR 5/3, moist) and grayish brown (10 YR 5/2, moist) silty fine sand; vesicular; weakly cemented by calcium carbonate; locally, upper 10 to 15 cm is noncalcareous and darker (10 YR 4.5/4, moist).

Coarse-grained lake sediments –

1a Interbedded coarse sand, pebble to cobble gravel, and minor fine to medium sand; gravel clasts are subrounded to rounded, maximum size 12 cm, mode less than 1 cm, 2 to 5 cm pebbles are common; well bedded, gravel beds range in thickness from 3 to 20 cm, individual beds are moderately to well sorted; loose; weakly cemented by calcium carbonate in places.

Silty lake sediments –

1b Grayish brown (2.5 YR 5/2, moist) to light olive brown (2.5 YR 5/3, moist) and dark yellowish brown (10 YR 4/6, moist) finely laminated clayey silt and silt; laminae are generally less than 1 to 2 mm thick; iron-staining occurs along many laminae.

Clayey lake sediments –

1c Light yellowish brown (2.5 YR 6/4, moist), light brownish gray (2.5 YR 6/2, moist), grayish brown (2.5 YR 5/2, moist), and dark grayish brown (2.5 YR 4/2, moist) silty clay and minor silt; finely laminated; contains some calcium carbonate concretions.

Unit 2 ALLUVIAL FAN DEPOSITS

Basal alluvium –

2a Dark yellowish brown (10 YR 4/4, moist) and dark brown (10 YR 4/3, moist) interbedded silty sand and gravelly sand to sandy gravel; contains subangular pebble-size clasts ranging in size from less than 1 cm to approximately 5 cm; moderately to well bedded; weakly cemented by calcium carbonate.

Stratified alluvium –

2b Dark brown to dark yellowish brown (10 YR 4/3.5, moist) gravelly silty sand; contains up to 20 to 30 percent pebble gravel, locally finer grained; weakly stratified; poorly sorted; moderately hard when dry.

Massive alluvium –

2c Similar to units 3a and 3b, except bedding is less well defined, particularly in the upper part of the unit; contains some coarse cobble gravelly sand having clasts up to 20 cm.

Unit 3 GRABEN-FILL DEPOSITS

A horizon of post-unit 3 soil –

3S Similar to unit 3; except very dark grayish brown (10 YR 3/2, moist); organic-rich; gradational lower soil boundary.

Graben-fill deposits –

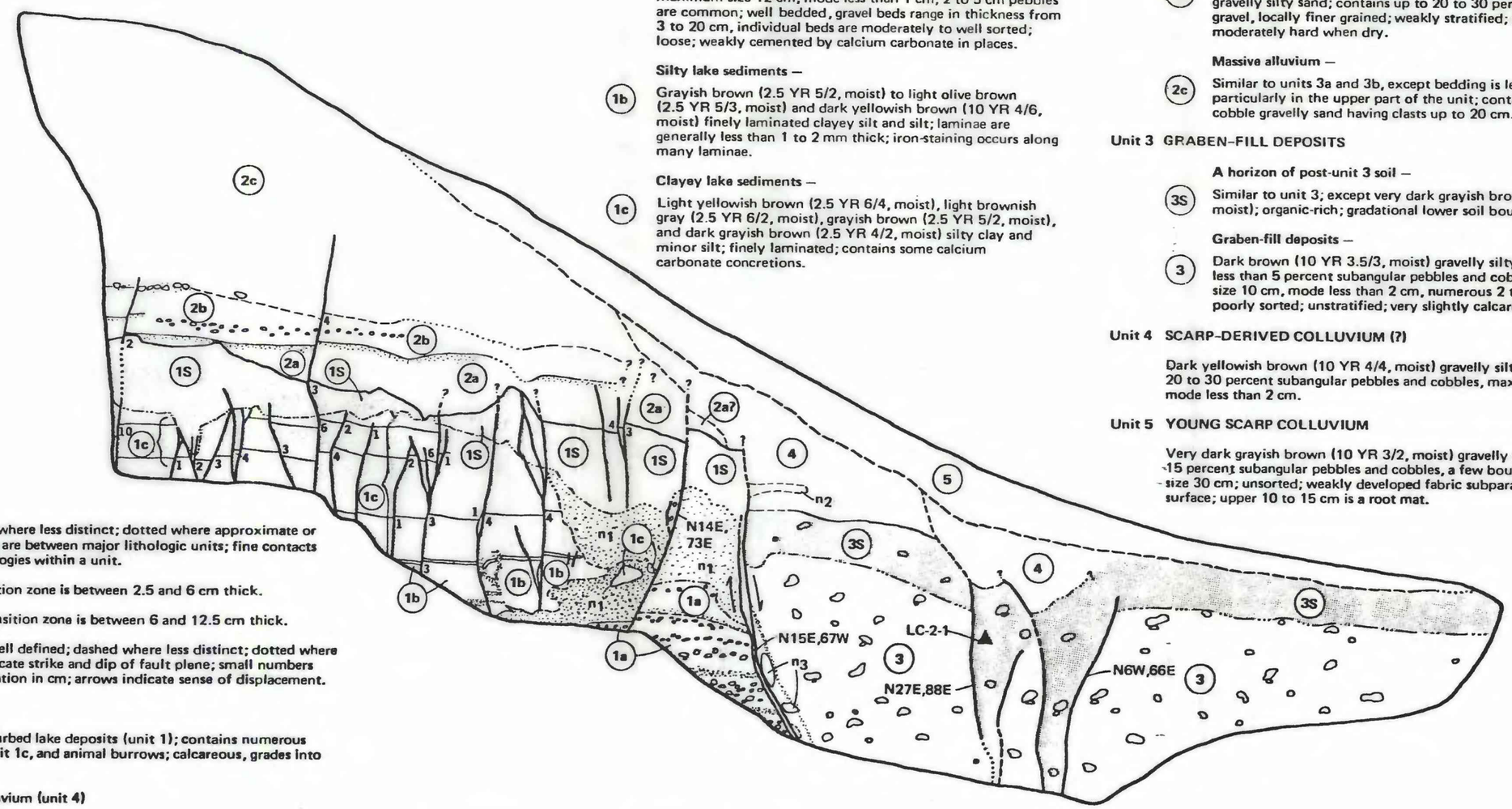
3 Dark brown (10 YR 3.5/3, moist) gravelly silty sand, contains less than 5 percent subangular pebbles and cobbles; maximum size 10 cm, mode less than 2 cm, numerous 2 to 7 mm clasts; poorly sorted; unstratified; very slightly calcareous.

Unit 4 SCARP-DERIVED COLLUVIUM (?)

Dark yellowish brown (10 YR 4/4, moist) gravelly silty sand; contains 20 to 30 percent subangular pebbles and cobbles, maximum size 10 cm; mode less than 2 cm.

Unit 5 YOUNG SCARP COLLUVIUM

Very dark grayish brown (10 YR 3/2, moist) gravelly silty sand, contains 15 percent subangular pebbles and cobbles, a few boulders; maximum size 30 cm; unsorted; weakly developed fabric subparallels ground surface; upper 10 to 15 cm is a root mat.



EXPLANATION:

Lithologic contact; dashed where less distinct; dotted where approximate or gradational; heavy contacts are between major lithologic units; fine contacts are between different lithologies within a unit.

Soil boundary; clear, transition zone is between 2.5 and 6 cm thick.

Soil boundary; gradual, transition zone is between 6 and 12.5 cm thick.

N14E,73E — FAULT: solid line where well defined; dashed where less distinct; dotted where inferred; bold numbers indicate strike and dip of fault plene; small numbers indicate stratigraphic separation in cm; arrows indicate sense of displacement.

NOTES:

n_1 Zone of deformed and disturbed lake deposits (unit 1); contains numerous shears, rotated blocks of unit 1c, and animal burrows; calcareous, grades into soil 1S.

n_2 Fragment of soil 1S in colluvium (unit 4)

n_3 Pods of calcium-carbonate cemented fan deposits along fault.

LC-2-1 — Location and number of C^{14} sample

Project No. 14093B	USGS Contract No. 14-08-0001-16827	LOG OF TRENCH LC-2 Little Cottonwood Canyon Site	Figure 8
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